## Appendix C Salvage PDFs

## Salvage Project Design Features

The following Project Design Features (PDF) are included in the design of salvage projects. These PDFs are a compilation of the Best Management Practices identified in the Medford District RMP and resource protection measures identified by the EIS ID Team. The PDFs will serve as a basis for resource protection in the implementation of any salvage actions. Additional PDFs for restoration projects are included in Appendix D.

- 1. The total number of skid trails will be minimized by designating skid trails with an average of 150' spacing. Avoid creating new skid trails and utilize existing trails where feasible in order to minimize ground disturbance, especially in thinning and selective cut units where no ripping is proposed. Design skid trails to minimize disturbance.
- 2. Skid trails will be located to minimize disturbance to coarse woody debris (CWD). Where skid roads encounter large CWD, a section of the CWD will be bucked out for equipment access. The remainder of the CWD will be left in place and not disturbed.
- 3. Tractor and/or mechanical operations will be restricted to slopes generally less than 35 percent.
- 4. Skid trails will be water-barred during the same operating season as constructed.
- 5. Ripping of skid trails will occur in all tractor yarded salvage units during the same operational season they were constructed. No ripping will occur within 100 feet of any existing green trees greater than 7" DBH.
- 6. All tractor yarding, soil ripping, and excavator piling operations will be limited to the dry season, generally from May 15 to October 15, and/or when soil moisture is less than 25 percent.
- 7. Areas identified for ripping (skid roads, landings, decommissioned roads) will be ripped to a depth of 18" utilizing a subsoiler or winged toothed rippers.
- 8. Cable yarding will require one-end suspension, full suspension over streams, and no streambank disturbance.
- 9. Hand water bar corridors in roadside salvage areas above roads where drainage would lead directly to streams.
- 10. Water bar all yarding corridors within Riparian Reserves.
- 11. Water bar yarding corridors where needed, as determined by the contract administrator.
- 12. Along the ridgetops in the FMZs, where large diameter snags are present and salvage logging is proposed to reduce risk, 2 stumps per acre >30" DBH and 30-36" high will be retained, where it can be safely accomplished, to provide habitat for bats on ridges.
- 13. Activity slash will be lopped and scattered, piled, or burned as necessary to reduce or eliminate additional fuel loading. Piled slash will be burned during the fall and winter to reduce impacts on air quality. All burning will follow the guidelines of the Oregon Smoke Management Plan.
- 14. Harvest will be restricted from March 1 to September 30 within ½ mile of known spotted owl sites (within ½ mile for helicopter operations). This restriction may be waived if non-nesting is determined. If any new owls are discovered in harvest units following the sale date, activities will be suspended until mitigation is determined.
- 15. Harvest will be restricted from March 1 to September 30 within ½ mile of known spotted owl sites (within ½ mile for helicopter operations) in any unsurveyed green stand determined to be suitable as northern spotted owl nesting habitat. This restriction may be waived if non-nesting is determined.
- 16. Activities will be restricted from February 1 to August 1 within ½ mile of suitable, unsurveyed peregrine falcon nest cliffs (within 1 mile for helicopter operations).
- 17. Activities will be restricted from March 1 to August 1 within ¼ mile of newly discovered great gray owl nests or within unsurveyed, suitable great gray owl habitat.
- 18. Surveys will be conducted prior to any activity that could alter habitat for Survey and Manage mollusk and red tree vole species. Sites will be protected consistent with current management guidelines.

- 19. Activities will be restricted from March 1 to July 15 within suitable unsurveyed goshawk habitat.
- 20. Special Status and Survey and Manage vascular plant, lichen, bryophyte, and fungi sites that require protection will be buffered. Buffer sizes will be determined based on species, proposed treatment, site-specific environmental conditions, and management recommendations.
- 21. Mitigation measures and buffers will be applied as needed, to avoid disturbance to known archeological sites.
- 22. Cultural resources discovered during project implementation will be reported to the authorized officers and protected until properly evaluated.
- 23. All road renovation, decommissioning, and/or improvement work will be limited to the dry season, generally from May 15 to October 15, or when soil moisture is less than 25 percent.
- 24. Dust abatement materials, such as lignin, Mag-Chloride, and/or approved petroleum based dust abatement products, will not be applied during or just before wet weather and at stream crossings or other locations that could result in direct delivery to a water body (typically not within 25' of a water body or stream channel).
- 25. Selected roads will be blocked and barricaded after use and before the beginning of rainy season (generally October 15).
- 26. When removing a culvert, slopes will be pulled back to the natural slope or at least 1:1.5 to minimize sloughing, erosion, and potential for the stream to undercut streambanks during periods of high streamflows. Stream channels will be restored to bank full width and natural grade.
- 27. Roads identified for decommissioning will be seeded with native seed and mulched in the same operational season they are decommissioned
- 28. Temporary roads constructed for harvest operations will be decommissioned within the same operating season they are constructed.
- 29. Equipment will be free of weed reproductive plant parts prior to moving into the management area.
- 30. Divert the stream around the work area in a manner (e.g. pipe or lined ditch) that will minimize stream sedimentation. Contractor will submit a water diversion plan for approval prior to stream work. To reduce movement of sediment downstream from the project site, the use of straw bales, geotextile fabric, or coconut fiber logs/bales immediately downstream of the work area will be required.
- 31. Location of waste stockpile and borrow sites resulting from road construction or reconstruction will be at least one site potential tree length from a stream where sediment-laden runoff can be confined.
- 32. Soil disturbed during road work or culvert replacement will be seeded with native grass seed after completion of work, using appropriate native species.
- 33. Seed, straw, and mulch will be free of weed reproductive plant parts, as per the North American Weed Free Forage Certification Standards.
- 34. Apply native grass seed on landings and tractor skid trails within 50' of existing roads. Apply native grass seed on all helicopter landings. Use appropriate native species.
- 35. A Spill Prevention, Control, and Countermeasure Plan (SPCC) will be required prior to operation and will include, but not be limited to, identification of hazardous substances to be used in the project area and identification of purchasers' representatives responsible for supervising initial containment action for releases and subsequent cleanup.
- 36. Refueling of equipment will take place outside of the Riparian Reserves.
- 37. All hazardous materials and petroleum products will be stored in durable containers outside Riparian Reserves so that any accidental spills will be contained and not drain into the stream system.
- 38. Appropriate mitigation measures will be applied to ensure that fluids or hazardous materials from heavy equipment operations do not enter stream channels.